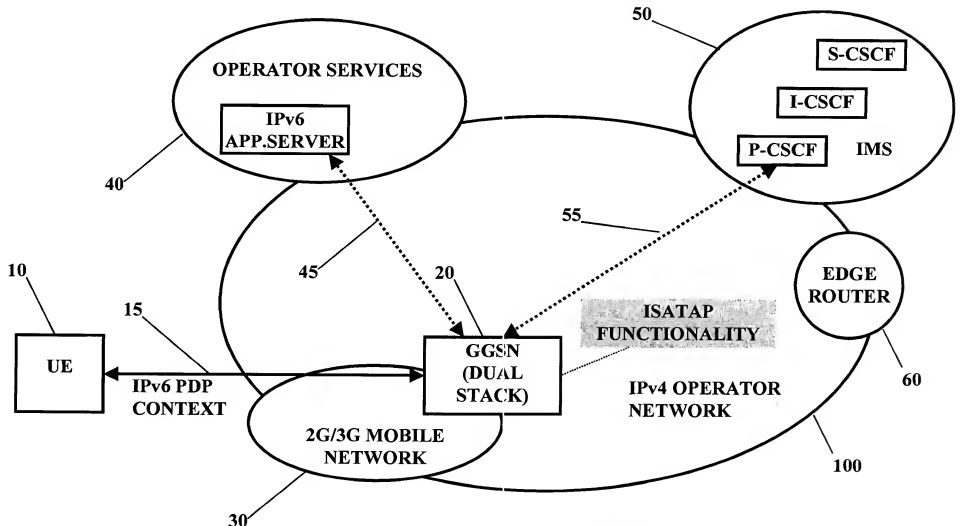
OPERATOR SERVICES
IPv6
APP.SERVER
40
50
S-CSCF
I-CSCF
P-CSCF
IMS
55
45
20
10
15
EDGE
ROUTER
ISATAP
FUNCTIONALITY
UE
GGSN
(DUAL
STACK)
IPv6 PDP
CONTEXT
IPv4 OPERATOR
NETWORK
60
2G/3G MOBILE
NETWORK
100
30

FIG. 1

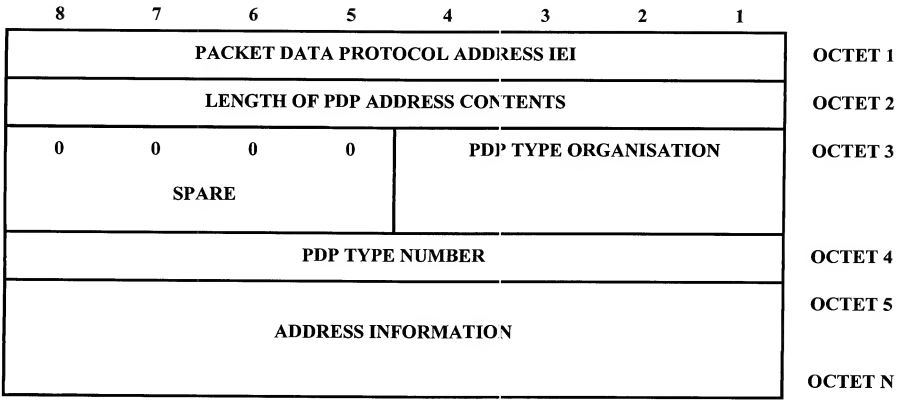
8 7 6 5 4 3 2 1
PACKET DATA PROTOCOL ADDRESS IEI
OCTET 1
LENGTH OF PDP ADDRESS CONTENTS
OCTET 2
0 0 0 0
PDP TYPE ORGANISATION
OCTET 3
SPARE
PDP TYPE NUMBER
OCTET 4
OCTET 5
ADDRESS INFORMATION
OCTET N

FIG. 2

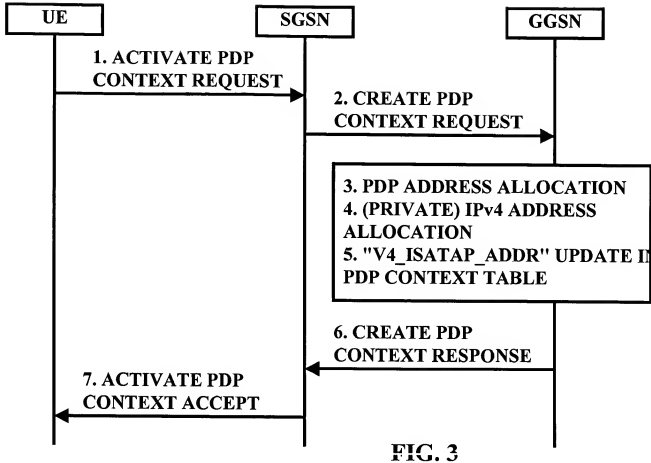
UE
SGSN
GGSN
1. ACTIVATE PDP CONTEXT REQUEST
2. CREATE PDP CONTEXT REQUEST
3. PDP ADDRESS ALLOCATION
4. (PRIVATE) IPv4 ADDRESS ALLOCATION
5. "V4_ISATAP_ADDR" UPDATE IN PDP CONTEXT TABLE
6. CREATE PDP CONTEXT RESPONSE
7. ACTIVATE PDP CONTEXT ACCEPT

FIG. 3

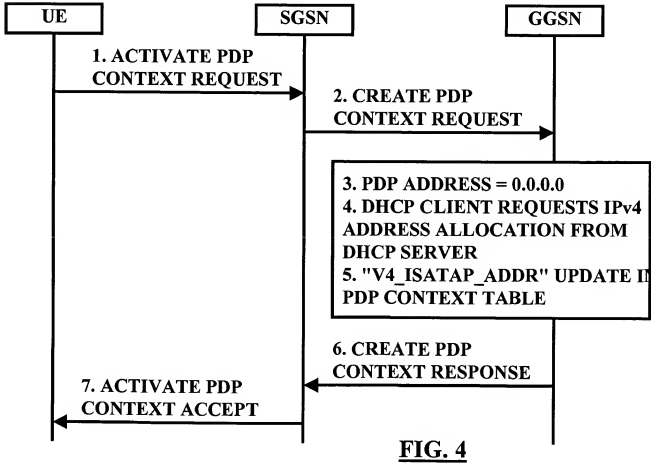
UE
SGSN
GGSN
1. ACTIVATE PDP CONTEXT REQUEST
2. CREATE PDP CONTEXT REQUEST
3. PDP ADDRESS = 0.0.0.0
4. DHCP CLIENT REQUESTS IPv4 ADDRESS ALLOCATION FROM DHCP SERVER
5. "V4_ISATAP_ADDR" UPDATE IN PDP CONTEXT TABLE
6. CREATE PDP CONTEXT RESPONSE
7. ACTIVATE PDP CONTEXT ACCEPT

FIG. 4

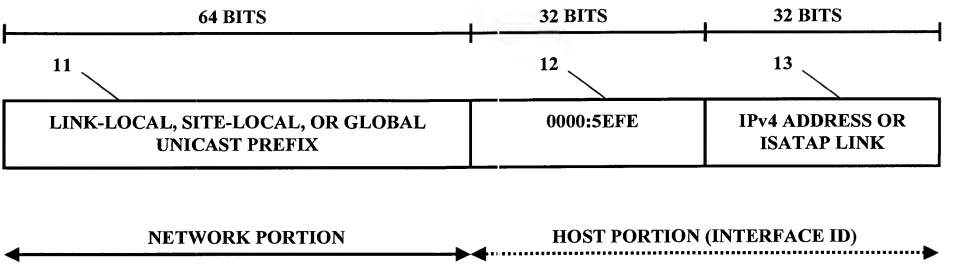
64 BITS
32 BITS
32 BITS
11
12
13
LINK-LOCAL, SITE-LOCAL, OR GLOBAL UNICAST PREFIX
0000:5EFE
IPv4 ADDRESS OR ISATAP LINK
NETWORK PORTION
HOST PORTION (INTERFACE ID)

FIG. 5

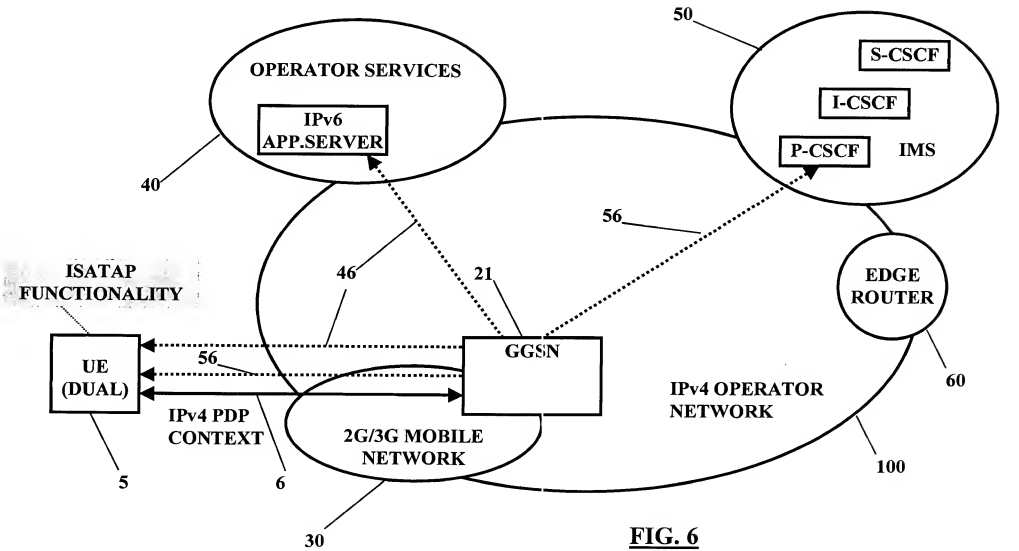
OPERATOR SERVICES
IPv6
APP.SERVER
40
50
S-CSCF
I-CSCF
P-CSCF
IMS
56
ISATAP
FUNCTIONALITY
46
21
EDGE
ROUTER
UE
(DUAL)
56
GGSN
60
IPv4 OPERATOR
NETWORK
IPv4 PDP
CONTEXT
2G/3G MOBILE
NETWORK
100
5
6
30

FIG. 6